



U.S. Department
of Transportation
**Research and
Special Programs
Administration**

400 Seventh St., S.W.
Washington, D.C. 20590

**IAEA CERTIFICATE OF COMPETENT AUTHORITY
SPECIAL FORM RADIOACTIVE MATERIALS
CERTIFICATE NUMBER USA/0530/S, REVISION 1**

This certifies that the source described has been demonstrated to meet the regulatory requirements for special form radioactive material as prescribed in the regulations of the International Atomic Energy Agency¹ and the United States of America² for the transport of radioactive materials.

1. Source Identification - J.L. Shepherd & Associates Model 8810-AmBe-154.
2. Source Description - Cylindrical triple encapsulation made of stainless steel and tungsten inert gas seal welded. Approximate exterior dimensions are 29.0 mm (1.14 in.) in diameter and 50.0 mm (1.96 in.) in length. Construction shall be in accordance with attached J.L. Shepherd and Associates Drawing No. A-0503-4225.
3. Radioactive Contents - No more than 185.0 GBq (5.0 Ci) of Americium-241. The Am-241 is in the form of an oxide mixed with a beryllium powder.
4. Quality Assurance - Records of Quality Assurance activities required by Paragraph 310 of the IAEA regulations¹ shall be maintained and made available to the authorized officials for at least three years after the last shipment authorized by this certificate. Consignors and consignees in the United States exporting or importing shipments under this certificate shall satisfy the requirements of Subpart H of 10 CFR 71.
5. Expiration Date - This certificate expires September 30, 2009.

This certificate is issued in accordance with paragraph 804 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the petition and information dated September 21, 2004 submitted by J.L. Shepherd & Associates, San Fernando, CA, and in consideration of other information on file in this Office.

Certified by:

Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety

OCT -5 2004

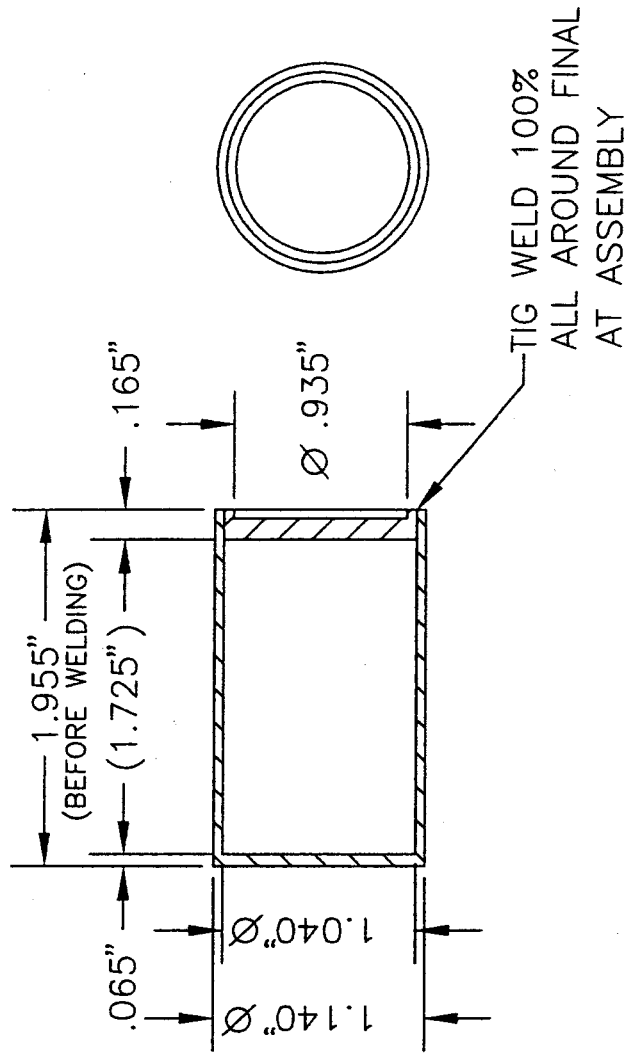
(DATE)

Revision 1 - Issued to renew the expiration date.

1 "Regulations for the Safe Transport of Radioactive Material, 1996 Edition (Revised), No. TS-R-1 (ST-1, Revised)," published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

2 Title 49, Code of Federal Regulations, Parts 100 - 199, United States of America.

REVISIONS		
REV	DESCRIPTION	DATE
		APPROVED



MATL = 304 SS (MACHINE FROM ROD)
 INNER CAPSULE = NUMEC AM-154

WITH OPTIONAL CAP

NOTE:

1. END CAP -304 SS.
2. SOURCE CERTIFIED "SPECIAL FORM".
3. END CAP HAS .002" REGISTER, .0005" INTERFERENCE FIT.
4. REMOVEABLE CONTAMINATION (LEAK TEST) AFTER LOADING $\leq 5 \times 10^{-3}$ mCi.
5. SCRIBE / ENGRAVE 3/32" HIGH LETTERS (MIN.):
 "JLS 7810-109R 5 Ci 241-AM/BE
 S/N 1400 AM 29 DATE:10/31/96
6. WELD PENTRANT TEST REQUIRED AFTER LOADING.
7. ALL DIM'S +/- .002"

J. L. SHEPHERD and Associates			
DRAWN BY	DATE	APPROVED BY	SCALE
D. TRAN	01-15-97	6/76	FULL
TERTIARY "SPECIAL FROM" ENCAPSULATION			
FOR NUMEC AM-154		A-0503-4225	